THE TENNESSEE FARMER.

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THE TENNESSEE FARMER, is published Monthly at $1,50 per annum, but $1 will be received if paid in advance. Payments made within three months from the commencement of the year will be considered in advance.

All letters on business in any way connected with the Tennessee Farmer must be addressed to Thomas B. Emmerson Jonesborough Ten. and in order to ensure attention must have the postage paid. We cannot afford to furnish a subscriber with the Farmer at the low price of $1 and then pay half that in postage on his letters.

According to the decision of the POST MASTER GENERAL, the Tennessee Farmer is subject only to newspaper postage, viz: one cent for each number within the State or within one hundred miles from Jonesboro', out of the State; one and a half cents to any other part of the U. States.

The publisher takes pleasure in having it in his power to announce to the subscribers of the Tennessee Farmer, that he has succeeded in procuring a very competent agricultural gentleman, to take charge of the editorial department. He flatters himself that the Farmer will be conducted in such a manner, as to afford general satisfaction.

He is well aware that the list of subscribers will be considerably reduced, on account of the absolute necessity there is, for collecting the debts due the late Editor; but he still hopes there will be a sufficient number left to authorize the continuance of the paper; especially if the friends of the work will continue the exertions which they have heretofore so liberally extended in its favor.

RASPING MACHINE.

In Thorndike we saw a very simple apparatus for grinding or rasping apples to make cider, which we thought would answer very well for rasping beets. It consisted of a short cylinder about 8 or 10 inches in diameter, in which were driven bits of wire or headless board nails, in columns about three or four inches apart, running spirally, and the nails or wires separated, perhaps a quarter of an inch. This is made to revolve at the bottom of a hopper, and close to a hard facing, on one side. The apples are crushed between the teeth on the cylinder and the hard facing, at the rate of about one bushel per minute. This apparatus is carried by water. It is owned by Capt. Timothy Ferrel, a very large farmer. The same water machinery is made to turn a grindstone and churn butter. A long lever, swung in the middle, which can be connected with the grind stone crank balances up and down, and plies the churn-dasher at the other end. The butter from a large churn full of cream can be extracted in about five minutes. The water power is nothing but a little babling brook, but Yankee ingenuity has compelled it to well work its way to a larger stream —to water horses, grind apples, turn grindstone, churn butter, and irrigate a fine homelot.—*Hampshire Gazette.*

[We have seen a rasp of the above kind, intended for rasping apples, which was turned by hand, and which succeeded admirably. The labor of turning was not great.—*Ed. Ten. Farmer.*]

Breeding.—Cooper gives us two excellent rules:

"Choose those animals or vegetables to propagate from, that possess the properties you wish to propagate, in the greatest perfection. Volumes may be written to illustrate and confirm this advice, he adds, but nothing can be added to it substantially.

"Never quit one good breed, until you can pick out from a better. By following this plain method for a few generations, always seeking for those parents who have the points you want in the greatest perfection, you certainly will improve your stock, whether of racers, cart-horses, corn or strawberries."

GOING AHEAD.

We have published several instances of specimens of a great yield of grain this season, but here is something that beat the whole 'all hollow.' Mr. Cotton Lincoln, of Cornish, has raised 51, 55 and 62 well grown and well headed stalks of rye from three grains yielding on an average of 1600 fold Mr. John Jameson, in the same town, raised from one seed of oats 52 stalks six feet high as they stood; only 2 heads were counted yieldidg 313 and 277 grains.—They were supposed to average over 200 grains to a stalk, which would be 10,400 grains from one seed.—*Yankee Farmer.*

We perceive, by our exchange papers, that the long continued drought has done serious injury to the Cotton crops. Many large Cotton growers will not realize more than half a crop.—*Wetumpka Sentinel.*

From the Farmer & Gardener.

FRUIT AND FRUIT TREES.

We are indebted to a pamphlet published by Messrs. Jackson & Scram. of Poughkeepsie, N. York. for the following "Concise treatise on the growing and propagating of Fruit Trees, Shrubs and Vines," and commend it to the favorable notice of our readers, as containing much excellent information in a form to render it highly acceptable, being founded on the theories of approved authors, tested by several years' practice, and improved by practical experiments.

Introductory Remarks.

Most fruit is in a great degree nutritious; the best kinds are a pleasing luxury, and the greater part, when ripe and in a perfect state, used with moderation, are not only inoffensive. but beneficial to health.

The art of growing and propagating fruit trees and good fruit, will be found to be plain, simple and easy, when rightly understood, and in no wise difficult to attain; but it has not received the attention it deserves, and consequently, fruit trees consist, in a great measure, of casual growth, or such as are the result of careless, unskilful, management, and are either stunted, or diseased, or both, and bear fruit which is unsound or inferior in quality, and the wood is of little value for timber or firewood.

Trees, when stunted from the seed, or afterwards, can rarely be restored to that vigour of growth which they have lost; and when kept too long in nurseries in a crowded state, which prevents their growing, they become too old to transplant, and either die in the operation, or continue dwarfs ever after.

Trees are frequently grafted and budded, not only when stunted and diseased, but when too large and old, and a great number of grafts stuck all over the trees, without regard to being placed in the leading and best placed limbs. The grafts may safely, as is the practice, be *warranted*, as they will live, but the natural stock will continue to form the bulk of the top and bearing branches, and the grafts will remain diminutive and bear fruit in proportion. 25 grafts well placed, are better than 100 placed at random:—10 grafts judiciously placed in a tree of moderate size, will change the whole top in a few years, where 300 grafts scattered all over a large tree, will not materially change its top or its fruit.

No person can, therefore expect to reap any advantage from grafting, unless on small and middle-sized trees, and such as are sound and vigorous; all others should be cut down as cumberers of the ground.

Pruning and training are much neglected, or very unskilfully done, making trees of uncouth shape and condition; trees, when hollow, are in a rapid state of decline; they will soon rot down. They are made so, in most cases, by pruning off limbs and branches, leaving stumps on the trees; these rot off, leaving a hole in the tree, which admits water, and soon rots and renders it hollow. Haggling off limbs with an axe has the same tendency. Pruning should always be done by cutting or sawing off limbs or branches *smooth* and *even* with the trunk or main branch from which it is taken. The wound will then soon heal over and be covered with bark, which is prevented by stumps or snags being left, as the bark cannot grow over dry snags.

Success in growing and propagating fruit trees, depends, like every other branch of business, on practical skill *how to do it*, and industry and perseverance in the performance. When you plant an orchard or single tree, plant sound, vigorous young trees, and no other than those you *know* to be such, either by having raised them yourself, or, if procured from a nursery, on such person's representations and assurances as you can safely rely. If you are the owner of trees bearing common or inferior fruit, save, in general, none but the small and middle sized, which graft with the best kinds of fruit. Regulate all by pruning, so as to form full, neat tops, suitably open to light and air; keep the earth around, and as far as the roots extend, mellow and suitably rich; secure them well by staking or boxing; water them a little in drouths until they have taken root.

Having thus given a general view or outline of the subject, I shall now proceed in detail to describe the method of producing sound, hardy, durable trees, and good healthy fruit, and of making the business successful, agreeable and profitable.

On the growth and propagation of Fruit Trees, Shrubs and Vines.

These may be propagated, 1. By grafting; 2 By budding or inoculation; 3. By cuttings and layers; and 4. From seed.

Season for each.

Grafting must be done in the spring, and may be performed as early as the middle of March, and as late as the first of June.

Budding may also be performed in the spring after the bark peels freely, with buds of the previous season's growth, or in summer and autumn after the buds of the same season have attained their growth, which is preferable.

Trees, cuttings and layers must be planted in the fall after frosts and before the ground is frozen, or in the spring after the frost is out and before vegetation has advanced much, which is also a proper time for pruning.

Seed should be planted so late in the fall as not to vegetate but little, if any, or so early in

the spring as to have the advantage of the whole season to grow and ripen in, to withstand the winter frosts.

Grafting and Budding in general.

Grafting may be performed on most kinds of trees on large or small stocks. Different methods of grafting should be used according to the size of the stock. It may be done in any manner by which the scions and stocks can be united. Those methods most in use will be noticed. Budding will only succeed on small stocks of *vigorous growth*, from the size of a yearling shoot to half an inch, and not exceeding about three fourths of an inch in diameter.

The apple and pear succeed well either by grafting or budding.

The peach, apricot and nectarine seldom fail when budded, but rarely succeed by grafting.

The plum and cherry take without difficulty by whip-grafting, which is the best method to propagate them; they may also be propagated with tolerable success by budding (the plum more readily than the cherry) and likewise by cleft grafting, when you succeed in splitting the stick without splintering the wood or injuring the bark, which can seldom be done.

Grafting and budding, for the most part, can only be practised with success on stocks of the same kind with the bud or scion. That is to say, the apple on apple stocks, pear on the pear, the cherry on the cherry, &c. Peaches, apricots and nectarines may be propagated on each other, and together on the same tree. *The apricot succeeds well on the plum*, and is more durable than on the stock of its own kind, or on the peach or nectarine, but not of so quick growth. The peach and nectarine may also be propagated on the plum, but will outgrow the stock, unless a plum stock be used growing equally or nearly as fast. Trees of the common small black, and red cherry, make excellent and perhaps the most durable stock for cherries of all kinds. The quince and the pear may be grafted on a thorn stock, &c.

Grafting.

Scions for grafts may be cut at any time in winter, and even late in the fall. The *proper time* is in February or March, before or at the time the buds, in this respect, and like kernels of grain, if disturbed when they swell and sprout they become of slender and sickly growth, and rarely recover their natural vigor. Cut for grafts shoots of the last spring's growth, with a little of the two years old wood. Take your grafts from fruitful trees, bearing good fruit of the kind: that is, if from a pipin tree, let it be from such as bear the best of pipins. The best grafts are those about the size of a pipe stem, taken from bearing branches, and not of side shoots of suckers, nor of the rank growth of the top of trees; these are apt to continue their rank growth, and out grow the stock, and are not so soon in bearing, nor so fruitful; if too slender they will not be thrifty, nor take well—tie up the grafts of each kind by themselves, with some distinguishing mark; put them in a cellar or out-house, to keep them from being saturated dried up or frost-bitten; set in a box of earth one-third their length, the earth kept moderately moist by occasional sprinkling, to keep them plump and prevent their shrivelling, but not so wet as to cause them to sprout.

Sions may be used for grafting, fresh gathered, at any time during the season of grafting before the buds open to leaf; early gathered grafts will, however, take more readily.

Take 8 ounces of *pure transparent rosin free from sediment*; about 2 or 3 ounces of bees-wax, and lard of half the size of a hen's egg, melt them over coals or a slow fire, stirring the composition with a stick; after thoroughly mixed and melted, empty it into a pail of cold water; rub some lard over your hands to prevent its sticking to them, and work it together thoroughly, as shoemakers do their wax. If the composition is too hard and does not work freely when making or while using it in grafting, rub over it more lard and work it in as before; if too soft add rosin and so on until it becomes suitable for use.

Cleft Grafting.

Cut down all diseased and stunted trees, and graft those only which are healthy and thrifty; of not exceeding 6 or 8 inches in diameter, in some of the leading, best placed and thriftiest branches on the tree with a view to changing the whole top. Trees of a larger size may be grafted, and partially and in some cases wholly changed, but not generally, without a great deal of labor and attention. Saw off the branches for stocks to graft on, at smooth places where they split well, and are in diameter of from one to two inches, prune the tree sufficiently to give room and air to the grafts, and gradually to force the juices of the whole tree into the grafts. Continue pruning each tree yearly, at any leasure time in the winter or spring, giving sun and air, and making room for the grafts as they grow, in such manner that if the grafts are of vigorous growth, in the third season to have cut out all except the grafts, and formed a new top. When limbs are taken off in pruning, it should be done with a saw or chisel, not an axe, and if large limbs, a coat of tar, paint or the composition mentioned, put over the wound.

Having the stocks prepared as above, and being furnished with grafts and the composition with a cafe knife or other convenient instrument

and hammer, split the stock in the middle, drive in a wedge of hard wood or iron of 6 or 8 inches in length, and open the split so as to admit the grafts freely, prepare the grafts, either all for the same tree, or one by one as used, by paring off about an inch and a quarter of the end of the graft or scion to the shape of a wedge, leave that side of the graft which is to be put towards the centre of the stock of *equal* thickness with that part which is to be towards the outside of the stock, with a view that the pressure of the stock, when closing upon the graft, be on the *inside* and not on the outside of the graft, where it is intended to unite with the stock: the outside if a little open, will facilitate the communication of the sap from the stock to the graft; but if closed up tight, may prevent such communication and endanger the graft; insert the graft as far as cut in wedge form, matching the *wood* of graft and wood of the stock without regard to the outside or surface of the bark on either: take out the wedge with sufficient care not to disturb or displace the graft. To stocks a little over an inch in diameter, one graft is sufficient, if larger, two are necessary, leaving on every graft from two to four buds. Finish the work by covering the crown of the stocks and the splits on each side, whether containing a graft or not, with the composition about the thickness of wrapping paper, by drawing it into strings over them, and smoothing it down lightly with your finger or thumb, covering the whole perfectly tight, to exclude air and rain, and more especially to prevent the sap from running out. The sap being confined, will force its way to the graft, which will readily receive it.

Stocks with only one graft will be improved by having the corner opposite the graft pared down to about the middle of the graft. It will enable them to heal over sooner, without leaving defects.

If the stock split uneven, cut it a little to fit the graft. If the bark splits from one side of the stock and adheres to the other, cut it down even with the wood, and match the graft to that side only, in case the other is too badly injured.

The grafts should be examined occasionally, and the shoots from the stocks ought not to be suffered to acquire a luxurient growth, but *gradually* thinned out and cut away as the graft acquires growth and strength to take the juices of the stock.

Let the limbs or stock for grafting be cut off, when convenient, above and near small branches or shoots, to be left at first to draw the sap.

If the above directions are substantially adhered to, few grafts will fail; and a middle sized tree of vigorous growth, may have the top changed, and in a fruit bearing state, in about three years.

WHIP GRAFTING.

This method is particularly calculated for nurseries, and is most expeditious and advantageous on all kinds of young trees, (except the peach, apricot and nectarine, on which budding may be considered, *at all times*, preferable) and is peculiarly adapted to the cherry and plum, and all such as do not split well. It may be performed near the ground, or at the height of five or six feet, near where you intend to form the top, or in limbs from the thickness of a pipe-stem to about three-fourths of an inch, and too small to cleft graft; and the top of young trees having such limbs, may have their top changed by this method, as large trees by cleft grafting; and if the tree have some large limbs to cleft graft, but not many, it may be partly whip grafted. The manner is this: provide yourself with the composition before mentioned, soft woollen yarn, and a sharp pen-knife; begin the work by cutting off the head of the stock, at some smooth part, by one clean slanting cut upwards, so as to form a slope on one side about an inch and a half or two inches in length, and make a small slit from near the middle downwards, to receive the tongue of the scion; then prepare the scion, by cutting it with three or four buds, prefering the lower or thick part, and cutting the lower end on one side also in a sloping manner, the length of and to fit the slope of the stock, as if cut from the same place, that the rinds of both may join, as nearly as possible, in every part; then make a slit upwards in the slope of the scion, so as to form a sort of tongue, to fit that made in the slope of the stock, which insert therein, so that the rinds of both may join together, or on one side, if the stock is larger than the graft; then bind the parts together with the woollen yarn, bringing it round the stock and graft moderately tight, and fastened accordingly; make a plaster of the composition between your fingers and thumbs, and wrap it round the stock and graft over the ligature, squeese it in your hand, so as to make it snug and tight, to keep the sap and exclude the rain and air, particularly at the ends. When the buds on the grafts have grown four or five inches, which will be about the middle of June or earlier or later, according to the season, the ligature becomes too tight, and will endanger the grafts; place the point of a knife on the upper side of the bandage or plaster, press it down through the composition and threads so as to cut them all in two, and take off the bandage and plaster entire. If the stock is large, and the graft is matched and united only on one side, leaving the other side exposed, put the plaster taken off, or a little composition, over the exposed part.

ROOT GRAFTING.

This is done by whip grafting upon young

seedling trees of the size of a quarter to an eighth of an inch, taken up, whip grafted at the root, and re-planted, and is practiced in nurseries for want of better stocks. It may also be done upon pieces of roots to about 3-4 of an inch in diameter and less, either by letting the roots remain or separating, and after grafting, replanting them. No composition is required; the yarn by which the graft roots are tied together will rot off and make room for growth. Larger roots may be cleft grafted, and then the composition is to be used.

Seed.

Select proper seed from healthy trees, sound, ripe and fair fruit. Let the seed be put into sand as they are collected, and put into a cellar, or other cool, damp place, until the proper time to plant them. If the seeds are kept in a warm and dry place, they seldom vegetate after it, and when they do, are generally of a sickly growth, and seldom make large and vigorous trees.

The Seed-bed.

The seed bed should be planted in the fall before the ground is froze, or as early in the spring as the ground is in a state to be ploughed or spaded. Having selected your seed, prepare the ground to receive it; this should be of good soil, not subject to standing water. Let it be spaded sometime previous to planting.—Plant the seed in rows, fifteen to eighteen inches apart, from one to two inches deep, according to the size of the seed and lightness of the soil. Apples, pears, and the like, eight or ten, and stone fruit, three or four in a foot, in the rows. Cover them up, and press the ground moderately over them.

Stone fruit should be cracked a little if planted in the Spring, which need not be done if planted in the fall. During the ensuing season, and every succeeding season, until the trees are removed, hoe out the weeds, loosen the ground, and thin out the seedling plants, (leaving only the most vigorous) to from eight to ten inches apart. Water them occasionally in a drought.

The Nursery.

After one season's growth, either early in October, or immediately after the frost is out in the spring, trees that have grown about a quarter of an inch in diameter and formed perfect roots may be taken up and placed in nursery rows. Apple and other trees of slow growth which have not attained that size, nor perfected their roots, should remain another season. The nursery into which the young trees are now to be transplanted, should be in good soil, open to the sun and air. After being ploughed or spaded, and levelled by raking or harrowing, dig trenches lengthwise, from 2 1-2 to 8 feet apart; then take up the trees from the bed, prune the roots and top with care, thinning out the branches and roots, cutting off the perpendicular or tap roots, and all irregular roots and branches, leaving only such roots as are in or near a horrizontal position. Every tree that does not contain a sufficient number of well placed roots should be thrown away. Open trenches six or eight inches deep, and wide enough to admit the roots freely. Dip the roots in water, which will make the earth adhere to them, and place the trees in the trenches from a foot to eighteen inches apart; draw the ground upon the roots, raise the tree a little so that the ends of the roots incline a little downwards; then gradually fill up the trench, at the same time pressing and packing the ground moderately around the roots. In dry weather, water the trees twice or three times a week, with rain water, or water warmed in the sun, about a pint to each tree, until they have thoroughly taken root. Plough between the rows and prune them every spring, keeping them clear of weeds during the season. Trees planted from the seed bed which have not been root grafted, will be fit to bud in the budding season of the summer and fall following, or to be whip grafted in the following spring. Those who prefer root grafting are referred to the article on root grafting.

Peach trees and the like, will be fit for transplanting in two or three years, and apples, plums, &c. in from three to five years. They will then have attained about six feet in height, and a proportional thickness, and will make large, healthy, fruitful, and durable trees.

Cuttings.

Cuttings should be taken from the shoots of the preceding year's growth, from bearing stocks, of sound and perfect growth, close jointed, and neither rank and pithy, nor small and imperfect, and planted six or eight inches deep. Slips from shrubs, such as gooseberries and currants, may be from twelve to eighteen inches long; and for the grape, woodbine, and other vines, from sixteen to twenty inches long. Plant shrub cuttings in an upright or perpendicular position. On the other hand, the grape and other vines must be planted sloping, and nearly horizontal, with the ends turned up in such a manner as to raise two or three buds on the cutting above the surface of the ground where planted. Before planting, the ground should be loosed for some distance round and the weeds kept down afterwards. Cuttings may be placed in a nursery a foot apart every way, and transplanted after one or two season's growth, or planted at first where they are to remain. Grape cuttings should be taken when pruning vines in the fall, buried during winter, and planted in the spring.

Layers.

All sorts of shrubs and vines which admit of being propagated by cuttings, will succeed equally as well and some better, by layers, and many kinds may be propagated by layers which cannot by cuttings. Layers may be prepared in various ways. My object is to point out only the most plain and simple method, best adapted to common use, and for all ordinary purposes. Take for layers such young suckers or shoots as can be bent down to the ground, without separation from the shoot or main stock; dig up and mix the earth alongside the shrub or tree from which the layer is to be selected; make a hole from four to six inches deep; prepare a peg or stick from six to eight inches long, sharp at one end and a hook at the other; cut out from the shoot intended for a layer the buds as directed for cuttings; when it is intended to raise a single stem, bring down the shoot and fasten it with the peg in the hole about twelve or fifteen inches from the end, then cover it over; raise the end of the layer so as to stand perpendicular from the ground and press the earth around it. In one year, the layer will have formed a root of its own, and may be separated from the main stock, the roots and branches pruned, and then planted permanently.

Gooseberries and Currants.

Currants and gooseberries, and particularly the first, are usually suffered to grow in bunches composed of side shoots and suckers, which absorb all the moisture and substance of the earth so that no herb or vegetable will thrive within a space of five or six feet of them, they increase until they choke each other, and become a heap of rubbish; the fruit is small, insipid and unhealthy. They can, with a little attention be raised with a single stem, the fruit then grows more abundant, larger, and better flavored, which is effected by merely cutting out every bud, with a chip of the wood from all that part of the cutting which, when planted, will be at or below the surface of the ground.

Planting an orchard.

In planting trees in an orchard or garden, where they are to remain, the same rules should be observed as in transplanting them from the seed bed to the nursery, in pruning, planting, watering, and previously mellowing the soil; they should be planted early in October, or as soon as possible in the spring, and the earth, unless it is ploughed, should be spaded four or five feet in diameter for a tree. They should be well secured with firm stakes, and tied up with whisps of straw or loose bandages of any kind, to secure them from being shook or loosened in the ground. The trees should be planted a sufficient distance apart so as to admit the sun and a free circulation of air when full grown; apple and pear trees at least forty feet, cherry and plum thirty feet, peach, apricot and nectarine, 25 feet. Tilling by raising a succession of crops of grain and suitable manuring, particularly around the trees, and as far as the roots extend, will promote a vigorous and rapid growth; in a few years they will attain considerable size, and bear fruit in proportion.

Soil and Situation.

Low, wet, or marshy ground is not suitable; it should be upland, or so much so as not to be exposed to standing water; should be open to sun and air, and tolerably rich.

That soil and situation which will bear good crops of winter grain, are well calculated for the cultivation of fruit trees, shrubs or vines. Occasional ploughing, digging, or in other way mixing or mellowing the ground, keeping down underbrush and weeds, and manuring are beneficial, and will at all times add to the health, vigor and fruitfulness of trees and vines.

Training and Pruning.

Trees, when young, both forest and fruit, may be trained to any shape, from that of a lofty towering top, by pruning away the large limbs, except the leading, upright one, to that of a low spreading top, by cutting off the leading, upright limbs. Pear and cherry trees do well with a high top; other kinds make the best bearers with round tops; and no tree, except it be intended as a wall or espalier, should be suffered to form a top less than 5 or 6 feet from the ground; to this end, all limbs and branches, should, to that height, be gradually cut away.

Pruning should not be neglected, in divesting trees of suckers from the root or side shoots, when they are not necessary to fill a vacancy; and generally in promoting a free circulation of air, and in preventing limbs and branches or vines from intersecting or crowding each other, a medium should be observed, as pruning *too much* is injurious. The superabundance of sap will cause side shoots, suckers, and eventually decay. The limb or branch intended to be removed should be cut away clear and smooth, without leaving stumps or snags, and even with the trunk or main limb from which they are taken. Large wounds, or those of a moderate size, exposed to wet, should be covered over with tar, paint or composition. If this is neglected, or stumps or snags of the branches cut away are suffered to remain, the stump or exposed part, will rot in the tree, render it hollow, and in a few years destroy it. Many orchards have rotted, and are now rotting down from this cause.

Diseases.

To prevent or cure diseases in vegetation, as

well as animal life, the best antidotes and principal remedies are to *remove the causes which produce them.* To this end, destroy caterpillars, all noxious worms and insects, prune off all unsound and affected parts. If this cannot be done without destroying its usefulness, cut it down and replace it with a young, healthy, vigorous tree. Swine rooting under trees, and birds frequenting the tops, building nests unmolested, will, in a great measure, if not wholly, destroy insects and vermin.

When a tree is bark bound, covered with rough bark and moss, these must be scraped off, and being washed with soap suds, or covered with a coat of lime wash, will be beneficial; prune the tree, removing side shoots and suckers from the root, and stir and manure the ground, for the most part, at least as far as the principal roots extend. The soil being sod-bound, or barren, or covered with underbrush, or all together, are the causes of the difficulty; these being remedied, the trees will again thrive.

It is a mistaken opinion, that the diseases which destroy peach trees, &c., caused by grubs, can neither be prevented or cured; either of which can be effected, *if properly and thoroughly attended to.* It is caused by an insect, in pricking the bark of the tree near the root, and depositing the seed which produces the grub, between the first of July, and frosts in the fall. To prevent this, about a foot of the trunk of the tree next the root, should be brushed over with a coat of some stickey, nauseous, or impenetrable substance, and this repeated as often as the substance wastes away, is washed off by rains; or crumbles away, during the time specified above, which may be tar, train oil, or white-wash, and a little ashes or lime kept on the ground around against the tree. When trees are affected, either in the fall or spring, dig and remove the earth around the trunk, to expose and give free access to every part affected; remove the gum, search thoroughly for the holes in the bark by which the grubs entered, prick into the bark with a sharp pointed knife: more effectually to find and trace the grubs and their holes, cut away the bark over the holes so as to lay them bare their *whole extent, length and breadth*, smooth the edges of the bark, scrape off all the gum and filth, which remove, together with all the grubs found; wash the holes and parts cut and scraped with lye or soap suds, or rub a little dry ashes over them, and close up the space dug with fresh soil; examine the trees occasionally, and more particularly every spring and fall; repeat the operation to a greater or less extent, when necessary. By this means the grub will be subdued and exterminated, and the trees flourish.

Agriculture is the nursery of patriotism.

HOGS AND HOG PENS.

A good sty is of the utmost importance in fatting hogs. Nor is it less important for keeping them in winter; as the more comfortably they are kept, the less nourishment they require.—The sty should be proportioned in size to the number of swine it is to contain. One of sixteen feet by twelve is probably sufficient for 8 fatting swine. It should be divided into two apartments; that in the rear which should be about six feet wide, should be close and warm for the hogs to lie in. Here they should have a constant supply of dry litter, when the weather is cool; for it is an essential point to keep them comfortable. The front part of the sty, which would then be about ten feet wide, should have the floor descending on one side for the filth to run off; and on this side should be an opening. The trough should be on the upper side, covered with one or more lids; and upright pieces should be set at such distances apart as that one hog only could put his head between any two of them, in order that while feeding, the weaker animals should be protected against the stronger. The whole should be covered with a roof; for it is essential that they be protected from storms, while they are in the outer or feeding apartment. According to the foregoing, if sixteen hogs are to be kept or fatted in the sty, it should be thirty-two feet long and twelve wide, and in that case there might be a sleeping apartment at each end. These apartments should again be subdivided, that, for the quiet of the animals particularly in fatting, too many may not be forced to lie together.—It would probably be best also to divide the feeding apartment; for too many hogs kept together, are not apt to enjoy that peace and quiet which is necessary to their fatting well.—Posts should also be set up in the sty for the hogs to rub themselves. If thirty-two hogs are to be kept or fatted, then perhaps the better way is to have two styes of the dimensions last described, placed together, with a roof placed over the whole, and a passage between them for the purpose of carrying food to the trough. If a part of the roof extended considerably beyond the sty, it would afford a convenient cover for forming a heap of compost from the dung of the swine.

SENTIMENTS.

A wise government will not be slow in fostering the agricultural interest.

Let every farmer who has a son to educate, remember and believe, that science lays the foundation of every thing valuable in agriculture.

Science must combine with practice to make a good farmer.

EDITORIAL.

LEGISLATIVE BOUNTIES.

It is one of the primary principles of our political institutions, that "all government is instituted for the benefit of the people;" and when we refer to the subject of legislative bounties for the encouragement of any great public interest, we are discussing one of the most obvious duties which their oaths of office and the obligations of patriotism impose upon our legislators. The agricultural is confessedly the great popular interest in our broad country; and it is to the subject of legislative encouragement of it in our own State, that we would now invite the public attention.

With the exception of the purchase of a few silk-worm eggs for gratuitous distribution some years since (a decisive measure truly!) we do not remember that our Legislature has ever done any thing, specially, to stimulate the agricultural industry of the State. A different policy, adopted at an early period of our history, by inviting the paternal care of the government over this paramount public interest, and thus inviting intelligence and capital into its ranks, might have averted much of the calamity which has befallen portions of the State through an exhausting and ruinous system of agriculture. The State of Maine—a comparatively youthful member of the confederacy—has, already exemplified this policy with beautiful results. Last year, it is estimated that Maine imported 150,000 bbls. of Flour. Her Legislature having voted a bounty to the growers of wheat, the production this year is estimated at about 320,000 bbls. Flour; completely meeting her whole domestic consumption, and leaving a large surplus for exportation.

Such a fact as this, speaks, audibly to the legislator and the patriot, and if we need more facts they are at hand. The little island of Great Britain subsists her dense population of 17 millions, (less than one third of whom are agriculturists) on the productions of her own narrow soil—importing but a small amount of provisions. On the other hand, the broad and fertile land of our confederacy, with a vastly greater numerical proportion of agriculturists, (estimated at three-fourths of the whole population) have failed to subsist our 16 millions of people! Bread stuffs come to our shores from almost every country in Europe! The cause of this tremendous difference is not difficult of discovery. The Government of Great Britain has fostered her agriculture with a liberal and parental hand. She has her schools and her boards of agriculture; and her national treasury expends large sums in making agricultural surveys—publishing standard works on the subject and rewarding with liberal bounties and distinctions, the intellect which has illustrated, or the skill and industry which have carried out in practice, the principles of good husbandry.—Our government, on the other hand, has done none of these things; she has left the agriculture of the country to take care of itself, and we need not, therefore, be surprised at the extraordinary difference in the relative results in the two countries.

We do think it is high time that something should be done by our Legislature, for the agriculture of the state. And we broach this subject, now, with the more confidence, from the fact that some Legislative aid extended to our farmers would not, we think, place in much jeopardy, that jewel of great value to the politician—his popularity. Surely the people, (three-fourths of them, at least, farmers) would approve such measures. And it is to the people themselves we would appeal. We would urge them to assert their right to legislative protection and encouragement. Let them instruct their representatives to this effect; and we have no reason to doubt that the result would constitute a new and most auspicious era in the agriculture of Tennessee.

The staples, however, of the different sections of the State are so variant, that some might apprehend difficulty in harmonizing its conflicting interests. But we humbly conceive that the *great* difficulty to be feared is the apathy of those most vitally interested in the matter.—Could public opinion be brought to act upon the subject, minor obstacles would vanish.—There need be no difficulty in distributing to every section of the State its due share of Legislative patronage. While East Tennessee would ask for bounties on her wheat crops, Mid-

dle and West Tennessee might demand protection for her cotton; and central schools might be established to impart scientific and practical instruction in all the various departments of farming, planting, grazing, &c.

This is a subject of vast importance. It demands much reflection, and a concurrence of effort to impress it, suitably, upon the public mind. We, therefore, respectfully invite the attention of our correspondents to its discussion and shall endeavor ourselves, to revert to it again.

[Communications.]

COOKERY—CONTINUED.

Transparent Pudding—Beat eight eggs very light, add half a pound of pounded sugar, the same of fresh butter melted, and half a nutmeg grated; set it on a stove and keep stirring till it is thick as buttered eggs—put a puff paste in a shallow dish, pour in the ingredients, and bake it half an hour in a moderate oven—sift sugar over it and serve it up hot.

Rice Milk for a dessert.—Boil half a pint of rice in water till tender, pour off the water and add a pint of milk, with two eggs beaten well stirred into it—boil all together two or three minutes—serve it up hot, and eat it with butter, sugar and nutmeg. It may be sweetened and cooled in moulds, turned out in a deep dish, and surrounded with rich milk, with raspberry marmelade stirred into it, and strained to keep back the seeds, or the milk may be seasoned with wine and sugar.

Buckwheat Cakes.—Put a large spoonful of yeast and a little salt into a quart of buckwheat meal, make it into a batter with cold water; let it rise well and bake it on a griddle; it turns sour very quickly if it be allowed to stand any time after it has risen.

RECEIPTS FOR COLORING.

To color Green—Take half a pound of the oil of vitriol, one ounce of indigo, pulverized; put them in a bottle, shake it repeatedly three or four days; then put it in a hickory bark dye, with two pounds of alum. This mixture will color twelve pounds of yarn. It is to be simmered over the fire several hours, frequently taking it out to air, on a pole over the kettle; you can dye it in iron copper or brass; when the yarn is dry, wash it in cold water; the hickory dye is to be taken off the fire when the mixture is put in out of the bottle, or it will run over; for the hickory dye must be boiling hot when it is put in.

To color Orange.—Make a strong soap suds, enough to cover your yarn well; put the arronetta in a bag, let it lay all the night in the soap suds; next morning rub it out, then put in as much strong lye as you can without rotting your yarn; put it on the fire and let it nearly come to a simmer, before you put in the yarn, raise it frequently and air it, and add more lye if you wish it deeper; 8 ounces will dye twenty cuts.

To color Red—To three pounds of yarn, take one pound of alum, and one pound of madder; dissolve your alum in a sufficient quantity of water to cover your yarn; scald it well in that water, then rinse it well in pure water; mix wheat bran and water to the consistence of thin gruel, a sufficient quantity to cover the yarn well; mix the madder well in this preparation; put in the yarn and boil two or three hours, stirring, and keeping it loose in the vessel. If you do not wish it deep, take it out in a very short time, but let it remain several hours if you wish it deep. Rinse it in cold water after letting it air. The bran must be boiled the night before, and a crock part full taken out and strained and the madder put in to raise the rest, strained in the morning, and that in the crock mixed with the other, before put on to boil.

To color Yellow—Take three-fourths of hickory bark, with the outside shaved off, and one fourth of black oak bark done in the same manner, boil them well together in a bell mettle kettle until the color is deep, then add allum sufficient to make it foam, when stired up, then put your yarn in, and let it simmer a little while, take it out and air it two or three times, having a pole over the kettle to hang it on, so that it may drain in the kettle, when dry rinse it in cold water.

From the Franklin Farmer.

HINTS TO YOUNG MECHANICS.

One of the most pernicious influences to which the young mechanic and appreatice are exposed, is the silly vanity he sees exhibited by the absurd votaries of *fashion*. If those contemptible creatures of folly, who spend their time in enervating idleness and their money in ridiculous extravagance, did no other wrong to society, than the non-performance of their fair share of the labors and duties of life, the injury would be measured by their insignificance. But they produce positive evils infinitely greater. The dandy conceives himself decidedly the most important personage in the village, while he is emphatically the most worthless. To see him strut along the street, exhibiting to the highest advantage, the shape of his leg, the cut of his coat, the elegant negilence of the arrangement of the locks on his forehead, and the glitter of his gold and jewelry, no one really could doubt the importance of such a personage—*in his own estimation*. The sight of a hard-handed mechanic fills him with horror, and lest his precious nerves might be shattered by coming in contact with such vulgar beings, he takes especial care to show them his abhorrence.—Now were it not for the influences, which the alluring trappings of wealth and the gaudy display of luxury, exert on the undisciplined mind of youth, the devotees of fashion would pass to the grave unnoticed and unknown. But to the young mechanic they are perpetual sources of annoyance, and examples of the most pernicious character. He is brought from the country, where he has lived in the plainness which indicates the good sense of the most practical and useful class of citizens, and being put to his trade in town, he is suddenly placed in the sight of the coxcomb. If that exquisite class of beings deign to notice him at all, it is with a contemptuous sneer. This makes him jealous of all those whose garb is habitually finer than his own. He is prone to think there are marked distinctions and classifications in society and that he is looked down upon; and he is apt to imagine he is slighted on all occasions, by those whom he supposes assume to belong to a higher class than himself. In the moment of his irritation, he forgets that no *gentleman* would ever treat him with less consideration, only because he was a mechanic; while, if his other merits are equal, the *well bred* never fail promptly to acknowledge them, and pay him at all times and places the same regard due to others. Now, the young mechanic should display more independence and manliness of character than to be annoyed by the impudence of others. When he hears a taunt or a sling at his occupation, he should have more dignity and self-respect, than to get into a passion about it. If his vocation is an honest, it is a respectable one, and he should never condescend to argue the respectability of the mechanic, for this would be to admit the question as a debateable one, and he should always manifest more *esprit de corps*, than to make such an implied confession. If a conceited coxcomb makes any taunting allusion to his occupation, he should take no notice of him; a gentleman never draws upon a puppy. Pursue your business with industry, boldness, and manly energy; never be ashamed of your apron or any badge of your vocation; attend to your labors assiduously through the day, and spend your evenings in reading and the acquirement of useful knowledge. Beware of spending your evenings at taverns or places of amusement and vice. Shun idle and vicious associates, and become intimate with none whose society will not benefit you, by improving your mind or your manners. Inform yourself fully and thoroughly with all the principles connected with the various operations of your own trade; and having accomplished this, devote yourself to the acquisition of knowledge in the various departments of useful learning. Above all, never forget that a high and honorable destiny is before you, and that it is only with yourself to apply the means of attaining it. Remember the names of Benjamin Franklin and Roger Sherman, and let their example incite you to imitation. Demean yourself always like a perfect gentleman, who carries the proofs of his breeding in his heart rather than on his back: and never on any occasion give any one reason to suppose, that you have forgotten for one moment, that you *are* a gentleman. And lastly, exhibit in all your intercourse with society, in social and business life, the profoundest regard for the principles and maxims of morality and integrity. Improve upon these hints, and you cannot fail to become useful and honorable members of community.

From the Mercantile Journal.

"THUS SAITH MRS."

Two gentlemen in Philadelphia were conversing with each other one day, on the propriety of "dining" or "taking tea out," on Sunday.—One of them whose religious views were of the kind usually denominated *rigid*, expressed his utmost abhorrence of the practice. "But how is it in your own family," said the other. "Is there nothing there on Sunday which is of a questionable character? Do you not have a "good dinner" made ready on Sunday; and does not this require labor?"

The man was at first a little staggered with his friend's question. At length he observed, "Why there's the command, *Six days thou shalt*

labor; and a *Thus saith the Lord,* is enough for me. I don't wish to reason at all about it."—"But," said the other, loath to lose the advantage he had gained, "why don't you regard the command in your own family?" "Ah," he replied, "I leave those things to Mrs. ———." "Oh! now I see how it is," said the other, "when you speak of what your *fellow-men* ought to do, you say, "Thus saith the *Lord;*" but the rule of conduct for *yourself* is, Thus saith Mrs. ———."

On hearing this anecdote, I could not help applying it to human life generally. When we are thinking of what is proper for others, a "Thus saith the Lord," is always at hand; but when ourselves come to act, our passions, or appetites, or habits, have acquired such an ascendancy over us, that we yield to their command, however arbitrary; and if we give the true reason for our conduct, it will often be, "thus saith Mrs."

One is extravagant in dress or equipage, or he permits those to be so, over whom he ought to have control; and yet no man is more ready to censure others for thus sinning against the Lord. Ask him why his practice should wage eternal war with his precepts. His only correct answer is, "thus saith Mrs."

We censure others for wasting so much time in idle chit-chat, or lounging or gossip; while we ourselves do the very same things, at least in principle. If we are to give the true reason for our inconsistency, it would be, "thus saith Mrs."

Mr. K's family use a barrel of brandy every year, we censure them as extravagant, especially in this day of reform, while we ourselves use two quarts of ale or cider, or a quart of good Madeira, daily in our own; which contains about the same quantity of alcohol. Why should we act thus inconsistently? *Thus saith Mrs.*

We would not violate our temperance pledge by drinking half a gill of ardent spirits for the world. Very well, we ought not. But we do not hesitate to drink a pint of ale in the course of a day, and this contains a much greater amount of the poison than half a gill of the common spirit. Why all this? Simply because *Thus saith Mrs.*

We are loud in our denunciations of the evils of intemperance generally. "Made in the image of God, ye fellow-men," we say, "why should you transform yourselves into beasts?" Yet we gormandize with luxurious and costly dishes, till we deserve a lower place than the beast to which it assimilates us. Why all this? Why preach such wholesome doctrine and then go our way and practice so differently? Because, *Thus saith Mrs.*

We talk much, it may be, of our freedom from any pernicious habits whatever. "Why then" says one, "do you continue to use strong tea and coffee, since they are now known to contain pernicious qualities?" "Oh, we cannot be denied such innocent pleasures as these. Food would lose half its relish, life half its charms, without them." "Why so?" "*Thus saith Mrs.*"

We boast of "mental independence." We are proud of having this the first article of our creed. Perhaps there is nothing that would be deemed by many as a more appropriate and just cause of resentment than a charge of sustaining the contrary character. Yet who will show me the individual, who does not, after all, rely upon the opinions of others? Who is in every respect, mentally independent? And are not those who boast loudest of this trait of character often, in some points the most *servile?*—Why *should* they thus give up their own rights to others? Is it not because *Thus saith Mrs?*

In short, why are those of us who make the highest pretensions to morality and religion, and who are the loudest to declaim against the love of the world and the things of the world, in many, too many instances, so "wordly" in our daily conversation and conduct that those around cannot avoid asking the question, "what do ye more than others?" Is it not because we serve two masters, or at least a master and a mistress? Is it not because *Thus saith Mrs?*

From the Maine Farmer.

PLOUGHING IN WHEAT.

We have long been of the opinion that the farmers of Maine did not work or stir their land enough. Mr. L. Whitman, of Winthrop, has related to us an experiment which goes to prove the importance of using the plough more, and of covering wheat when sown more effectually than it is done by the harrow. Last year he ploughed up a piece of sward land that had become bound out, as it is called, and sowed upon it peas and oats. He had a fair crop. Late in the fall he ploughed it once more, and harrowed over; he then put the plough through it again, making three times in all. When he had ploughed a part of the land the last time, he concluded to sow wheat on the remainder and plough it in. This he did, and afterwards sowed wheat upon the first ploughed piece and harrowed it in. He also passed the harrow over the place in which the wheat had been ploughed, so that the whole of the land was used alike. He put ashes to the amount of ten bushels to the acre upon the whole piece. The result at harvest was, a good crop on the whole land, but a decided advantage in the piece where the wheat was covered by the plough. It yielded more per acre than the wheat covered by the harrow.

From the Practical Farmer.

WORKING OF OXEN.

Much differer ce,of opinion,says the author of the Enc. of Egr., for merly prevailed as to which of the two animals,the horse or the ox,should be preferred for the purpose of farm labor; and the preference has generally been given by speculative writers to the ox, and by practical farmers to the horse. The first objection to the oxen is, that they are unfit for the various labors of modern husbandry, for travelling on hard roads in particular, for all distant carriages, and generally for every kind of work which requires dispatch. Another is, that an ox team capable of performing the work of two horses, even such kind of work as they can perform, consumes the produce of considerable more land than the horses. And as to the money price of the horse and ox, this, it is evident, is merely a temporary and incidental circumstance which depends upon the demand.

Notwithstanding the judgment thus pronounced on this subject, we find in this country the practice and experience of many farmers to be directly at variance with it. In a communication of the Hon. Levi Lincoln,of Massachusetts, to the Secretary of the Pennsylvania Agricultural Society, he says: "You inquire the mode of *breaking*, *feeding*, and *working* our oxen.

"The best broken oxen are those which are early trained, and accustomed to the yoke with occasional light work. They are often broken at as early as one or two years of age, with gentle and patient usage. At this period they are more docile and tractable, and it is thought become more powerful by becoming sooner accustomed to each other, and to the application of their strength to the draught. I believe they may be taught to travel in almost any gait; certain it is, the rate at which oxen differently broken will walk with their load, would seem incredible to a person ignorant of the difference in the mode of their training. To accustom them to a quick pace, they should at first be driven to the yoke, while young, without any or with a very light weight, and never heavily loaded until they have arrived at full strength and maturity.

"A great fault with many people is too much indifference to the *construction of the yoke*. Almost any shapeless piece of wood, with holes for the insertion of the bows, is made to answer; but to the ease of the draught, the adaptation of the yoke or bow to the neck of the bullock, and the position of the staple and ring in the yoke, rae altogether material. For common use and for ploughing, I have found that yokes are generally too short. Cattle of the largest size require a yoke from four and a half to five feet in length. In short yokes they are apt to *haul*, as is termed, that is, draw from each other, and to such a degree, in some instances, as to cross their forelegs, and destroy their power, and greatly impede their progress. I once owned a pair, made totally useless by this habit, and afterwards entirely corrected it by the application of a yoke of eighteen inches more length. A short yoke is necessary only in snow paths, where cattle would otherwise *crowd* against each other, the opposite of *hauling*, but of the same mischievous effect.

"In respect to what oxen may be made to do in a short time, or as an experiment on their strength, I must refer you to the results of our ploughing matches and trials of strength. With us they are bus little used on the road, except in the transportation of heavy loads for short distances in the same town, or between neighboring towns. One reason why horses are preferred for wagoning on the road may be, that they can be made to travel quicker, and that rom the construction of the hoof they are less liable to lameness than the cloven-footed ox, or by becoming foot sore. On the other hand,the patient and steady labor of the ox finds no substitute in the horse for the labor of the farm, and the latter is seldom seen there, except in occasional aid of the ox team, or with the light plough between the rows of corn.

"The value of a yoke of oxen or a pair of horses for use in all the work of a farm, admits of no comparison. So decided is the preference for the former that I do not believe a single farmer can be found in this extensive agricultural country, who performs his labor by horses without oxen; while there are *hundreds*, I had almost said *thousands*, who make no other use of horses in husbandry, than to furrow for planting, and plough among their corn for hoeing.

"Our oxen, also, to answer part of your inquiries, are kept in a cheaper and less expensive manner than horses. In the summer they are uniformly grazed in the pastures. In the cold and winter seasons they are put into the barns, and fed upon *stock* hay, as it is called, that which grows in meadows, and upon the fodder of corn stalks, husks, &c., unless, indeed, they are more severely worked than usual, when hay of better quality is given them; and in all cases as the spring advances their keeping is improved, and with better hay some grain is added. I speak of the general practice of farmers. There are some who keep their oxen more generously. and others more hardly than I have mentioned. But with a clean and warm stable, the daily application of the curry comb or card, and coarse food, without severe labor, the best farms will at times exhibit teams of most vigorous and powerful cattle, and their best hay and their grain will be saved in their

beef and pork, and in the produce of their dairies for the market.

"Oxen yoked to a cart are generally superior to horses attached to a wagon. The greater weight which may be carried by the former, and the facility with which it is removed, by *tipping up*, are of most striking advantage in the ordinary business of a farm. It is said that a cord of green oak or hickory wood is not an unusual load for a yoke of oxen to carry on a cart, while it would certainly require the power of three horses on a wagon. The estimate of relative expenses of keeping a pair of horses and of oxen, is in the proportion of three for the former, and two for the latter, and to this is to be added the value of the ox for beef when their strength fails for labor."

ON THE CULTIVATION OF FRUIT TREES.

Description of a method of cultivating Peach Trees, with a view to prevent their premature decay; confirmed by the experience of forty-five years, in Delaware state, and the western parts of Pennsylvania. By Thomas Coalten, Esq. of Bedford county, Pennsylvania.

From the Transactions of the American Philosophical Society.

The death of young peach trees is principally owing to planting, transplanting, and pruning *the same stock*, which occasions it to be open and tender, with a rough bark, in consequence of which insects lodge and breed in it, and birds search after them, whereby wounds are made, and the gum exudes, and in a few years the tree is useless. To prevent this, transplant your trees as young as possible, if in the kernel it will be best, as there will then be no check of growth. Plant them sixteen feet apart. Plough and harrow between them, for two years, without regard to wounding them, but avoid tearing them up by the roots. In the month of March or April, in the third year after transplanting, cut them all off by the ground, plough and harrow among them as before, but with great care, to avoid wounding or tearing them. Suffer all the sprouts or scions to grow, even if they should amount to half a dozen or more, they become bearing trees almost instantaneously, on account of the strength of the root. Allow no animals but hogs to enter your orchard, for fear of their wounding the shoots, as the substance drains away through the least wound, which is essential to the health of the tree, and the good quality of the fruit.

If the old stock is cut away the third year after transplanting, no more shoots will come to maturity than the old stump can support and nourish, the remainder will die before they bear fruit, and may be cut away, taking care not to wound any other stock. The sprouts when loaded with fruit will bend, and rest on the ground in every direction for many years, all of them being rooted as if they had been planted, their stock remaining tough, and their bark smooth, for twenty years and upwards. If any of the sprouts from the old stump should happen to split off and die, cut them away, they will be supplied from the ground by others, so that you may have trees from the same for 100 years, as I believe. I have now trees from one to thirty-six years old, all from the same stump. Young trees, formed in this manner, will bear fruit the second year; but this fruit will not ripen so early as the fruit on the older trees from the same stump. Three years after the trees are cut off, the shoots will be sufficiently large and bushy to shade the ground so as to prevent the growth of grass, that might injure the trees; therefore ploughing will be useless, and may be injurious by wounding them. It is also unnecessary to manure peach trees, as the fruit of manured trees is always smaller and inferior to that of trees which are not manured. By manuring you make the peach trees larger, and apparently more flourishing, but their fruit will be of a bad kind, looking as green as the leaves, even when ripe, and later than that of trees which have not been manured. Peach trees never require a rich soil; the poorer the soil the better the fruit; a middling soil produces the most bountiful crop. The highest ground is the best for peach trees, and the north side of hills the most desirable, as it retards vegetation, and prevents the destructive effects of late frosts, which occur in the month of April, in Pennsylvania. Convinced, by long experience, of the truth of these observations, the author wishes they may be published for public benefit, and has been informed, that Col. Luther Martin and another gentleman, in the lower part of Maryland, have adopted a similar plan with great advantage.

STATISTICS OF EGGS.—M. A. Legrand, of Paris says, the number of eggs exported fom France, from having been less than two millions in 1813, increased in 1822 to nearly fifty five millions. In 1824 ninety and a half millions. In 1835 seventy five millions were exported to England, 60,800 to Belgium, 49 606 to the United States, and nearly as many to Spain and Switzerland! In Paris every soul eats over 115 eggs a year; in all the rest of France over seven millions are consumed. What hens the French must have.

Richmond Enquirer.

Nothing more annoys an enemy than kindness. It is an arrow that generally hits the mark. It is the most severe, yet the most noble mode of treatment.

MANURES AND MANNER OF APPLYING THEM.

The following letters from Mr. Sampson of Goochland, Va., will be found highly interesting. They contain more valuable information on the subject of the application of manures than any article of the same length which we have met with. We can answer for the correctness of his plan, having ourself tested the superior advantages of it:

"*Dover, Goochland, Jan.* 31, 1833.

"The surface manuring mentioned by my neighbor Col. W. has become very much the practice in this section of country. I have myself applied my manure mainly in that way for several years past and with good effects. I have also selected my wheat fields as the most advantageous application of the manure, that is, for the benefit of both wheat and clover, as my wheat fields are uniformly sowed down with clover seed. I have ascertained satisfactorily from practice, that land of *inferior grade* will be better taken with clover with a light application of manure on the surface, than land *much better* without it: nor have I any doubt but that it is the best practice if wheat alone is the object. My practice for the application of the manure has been, to be well prepared with team and tools, for the speedy hauling when the land is frozen, in order that no injury may be done the wheat. The spreading may be done at almost any time, provided you do not let it remain long enough to bleach or injure the wheat. I am well assured that the best application that can be made of manure is on the surface, for both wheat and clover; and through the agency of the clover, I would say the best for the land. I have no doubt that it may be extended doubly as far, advantageously. I also consider wheat straw worth more on the surface, than any other application of it; indeed, I use but little in any other way, and use leaves from the woods as litter for my stock-yards.

"*February* 23*d*, 1833.

"With respect to my practice with the use of manure, it varies somewhat according to circumstances, having such a variety of soils, and the condition in which the land is found varying from the actual gullied or galled state, to all the grades of naturally good and mean land. It suffices to say, that when a piece of land is intended for cultivation, which is entirely exhausted, gullied or galled, the first process would be to give it a more even surface by ploughing in and levelling gullies, &c. When this is pone, I litter freely for the purpose of turning in with the plough; leaves from the woods I prefer, as they are more readily turned under than wheat straw, which enables me to keep more straw for applying on the surface, where I greatly prefer it. I usually plaster the litter before turning it in, say at the rate of a bushel to a bushel and a half per acre. On land thus prepared, I seed oats, but reap but little, as might be supposed. I fallow this land again, and seed wheat at the fall, when the litter thus turned in, is pretty well rotted. On the wheat I top-dress lightly, and plaster again, say three pecks to a bushel per acre, which produces a saving crop of wheat, and enables me to get the land well taken with clover, which I think an all important object where improvement of the soil is wished. My wheat straw I generally apply on my pasture land, twelve months, or more or less as may be convenient, before plowing in.

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MANURES AND MANNER OF APPLYING THEM.

The following letters from Mr. Sampson of Goochland, Va., will be found highly interesting. They contain more valuable information on the subject of the application of manures than any article of the same length which we have met with. We can answer for the correctness of his plan, having ourself tested the superior advantages of it:

"*Dover, Goochland, Jan.* 31, 1833.

"The surface manuring mentioned by my neighbor Col. W. has become very much the practice in this section of country. I have myself applied my manure mainly in that way for several years past and with good effects. I have also selected my wheat fields as the most advantageous application of the manure, that is, for the benefit of both wheat and clover, as my wheat fields are uniformly sowed down with clover seed. I have ascertained satisfactorily from practice, that land of *inferior grade* will be better taken with clover with a light application of manure on the surface, than land *much better* without it: nor have I any doubt but that it is the best practice if wheat alone is the object. My practice for the application of the manure has been, to be well prepared with team and tools, for the speedy hauling when the land is frozen, in order that no injury may be done the wheat. The spreading may be done at almost any time, provided you do not let it remain long enough to bleach or injure the wheat. I am well assured that the best application that can be made of manure is on the surface, for both wheat and clover; and through the agency of the clover, I would say the best for the land. I have no doubt that it may be extended doubly as far, advantageously. I also consider wheat straw worth more on the surface, than any other application of it; indeed, I use but little in any other way, and use leaves from the woods as litter for my stock-yards.

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From the Southern Spy.

HYMN.

Air—"NOTHING TRUE BUT HEAVEN."

WORDS BY MRS. C. LADD.

I.

Come sinners, come, we all invite
Who want their sins forgiven;
We'll with thee kneel, we'll with thee pray,
We'll with thee wrestle, till thy day
Of grace dawns bright from heaven.

II.

Give up thy hearts, speak but the word,
Thy sins will be forgiven—
Why longer tarry, longer roam,
Thy Saviour offers all a home—
A lasting home in heaven.

III.

No longer doubt a Saviour's love,
His blood was freely given;
It was for you, it was for me,
He groan'd and bled on Calvary,
That we might rest in heaven.

IV.

Jesus now with the father pleads,
Oh! let them be forgiven—
Take them not in their sins away—
Spare them a year—another day,
And they may turn to heaven.

V.

A sweet foretaste of joys above,
To man below are given;
Redeeming grace—redeeming love,
Is sent to cheer us from above,
And guide us on to heaven.

VI.

See angels wait, they are hovering round,
To bear the news to heaven—
The prodigal at length is found,
The high arch echoes with the sound,
One soul has been forgiven.

POWELTON, GA.

VALUE OF TIME.

"Seize time by the forelock," otherwise he may escape you. "Remember that delays are dangerous," "Procrastination is the Thief of time." When a thing is to be done, it should not be deferred. Recollect, the language of Shakspeare,—

"When tis done, if'twere well done—
'Twere best 'twere done quickly."

I will do it bye and-bye, when I have time, has been the ruin of many an industrious and well meaning man.

In a late popular romance is the following excellent advice, which deserves to be engraven in golden letters in the office, counting room, or workshop of every man of business:

"Let no man trust till to-morrow—it is the cheat of life—the future that never comes—the grave of many an unburied enterprize of noble birth, which like the lightning's flash, is born and dies ere the voice of him who sees can cry, BEHOLD!"

CERTAIN CURE FOR THE DROPSY

Take cinder from the Blacksmith shop and beat it fine; sift it to take out the coarse particles: mix the fine cinder in a pint of honey until it is stiff enough to lay on the point of a case knife, not hard like pills. Give the patient as much as will lay on the point of a case knife three times a day; morning noon and night.—This mixture is very purgative, and will cause the patient to discharge great quantities of water, both purgatively and by urine. The portion may be given according to the operation, if it appears too severe, give less, if it does not operate give more; continue it until the swelling is gone.

The patient may eat any diet but milk, of which he should not taste a drop, neither take any other kind of medicine while using the above. I have known several persons who have been cured of that terible disease by using the above mixture, some of whom were so bad that the water oozed out of their feet and legs and left their tracks as they walked upon the floor.

Sugar from Pumpkins!—A discovery has been made in France which, if transplanted into this country, will make the pumpkin fields of New England dangerous rivals to the canefields of Louisiana and the West Indies. A French paper says: "A complete revolution is expected to take place in the manufacture of native sugar—a revolution which will probably compel the beet root growers to 'hide their diminished heads.' In other words, the pumpkin is about to enter the fields as a rival of the beet root, and to force the Chamber of Deputies to revise its late enactments on the sugar question. An industrious speculator is on the point of establishing a manufactory for extracting sugar from this overgrown and hitherto despised production of the vegetable world, the first experiments on which, it is added, have been crowned with complete success."

ADDITIONAL AGENT.

Rev. THOMAS M. KING, Larkinsville, Ala.

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